

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned, "Version with markings to show changes made."

REMARKS

Claims 1-22 are pending in the application. Claims 1-5, 8-11, and 13-22 were withdrawn from consideration by the Examiner subject to the Restriction Requirement being deemed final. As such, Claims 1-5, 7-11, and 13-22 are now canceled without prejudice. Applicants reserve the right to prosecute the subject matter of the non-elected, now canceled claims in future divisional applications.

The specification is amended to recite the proper priority claims. Claims 6 and 12 are amended, as indicated above, to further clarify the present invention. Support for the phrase "antigen binding fragment" in amended Claim 6 can be found, e.g., on page 15, of the specification.

New Claims 23-29 are added. Support for new Claims 23-25 can be found, e.g., in originally filed Claim 7. New Claim 26 finds support on page 31, lines 9-21, of the specification. Support for new Claims 28 and 29 can be found, e.g., on pages 15-16, of the specification. Applicants believe no new matter is added by the foregoing amendment.

I. Objection to the Specification

The Examiner objected to the format of the priority claim made in the Specification on page 1, lines 4-5. Applicants have amended this statement as noted above.

In view of the foregoing, Applicants respectfully request that the objection to the specification be withdrawn.

I. Rejection of Claims 6, 7, and 12 under 35 U.S.C. §112, First Paragraph

The Examiner rejected claims 6, 7, and 12 under 35 U.S.C. §112, first

of Office Action) on the basis of the recitation of "mammalian" and "conservatively modified variants". As amended, Claim 6 does not recite these phrases, nor does amended Claim 12. Claim 7 is canceled and the rejection is therefore moot as to this claim. New Claim 23-29 also do not recite "mammalian" or "conservatively modified variants", and are free from this rejection.

In view of the above amendments, the rejection of Claims 6, 7, and 12 is overcome. Withdrawal of this rejection is respectfully requested.

II. Rejection of claims 6, 7, and 12 under 35 U.S.C. §112, second paragraph

The Examiner rejected claims 6, 7, and 12 under 35 U.S.C. §112, second paragraph. The Examiner stated that Claim 6 depends from a non-elected invention. Claim 6, as amended, is now an independent claim. The rejection of Claim 7 is moot, as this claim is now canceled.

The Examiner further indicated that it is unclear what "312C2" means. Applicants submit that Claims 6 and 12 have been amended to replace "312C2" with "SEQ ID NO:2 or 4", and are clear and definite. New Claims 23-29 do not recite "312C2" and are thus also clear and definite.

In view of the above, Applicants submit that the rejection of Claims 6, 7, and 12 under 35 U.S.C. 112, second paragraph is overcome. Withdrawal of the rejections respectfully requested.

III. Rejection of claims 6, 7, and 12 under 35 U.S.C. §102(b)

The Examiner rejected Claims 6, 7, and 12 under 35 U.S.C. §102(b) as anticipated by Cocks, et al. (1995) Nature 376:260 ("Cocks"). Cocks teaches a protein named SLAM having low sequence identity to the present invention.

As amended Claims 6 and 12 recite antibodies which specifically bind to SEQ ID NO:2 or 4. Claim 7 is canceled and the rejection is therefore moot as to this claim. New Claims 23-29 depend from Claim 6. The cited reference does not teach an antibody which specifically binds to SEQ ID NO:2 or 4 and thus fails to anticipate Claims 6, 12, and 23-29.

Applicants believe that the rejection of Claims 6, 7, and 12 under 35 U.S.C. 102(b) is overcome by the foregoing amendments. Withdrawal of the rejections under 35 U.S.C. §102 is respectfully requested.


Conclusion

Applicants' current response is believed to be a complete reply to all the outstanding issues of the latest Office Action. Further, the present response is a bona fide effort to place the application in condition for allowance or in better form for appeal. Accordingly, Applicants respectfully request reconsideration and passage of the claims to allowance at the earliest possible convenience. Should the Examiner deem allowance inappropriate at this time, Applicants respectfully request an interview be granted with the undersigned to consider any issues.

Respectfully submitted,

Dated: December 14, 2001

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VERSIONS WITH MARKINGS TO SHOW CHANGES MADE**In th claims:**

Please cancel Claims 1-5, 7-11, and 13-22, without prejudice.

Please amend Claim 6 and 12 and add new Claims 23-29 as indicated below.

6. (Once Amended) An antibody or antigen binding fragment thereof which specifically binds a protein or peptide of [Claim 1] SEQ ID NO:2 or 4.
12. (Once Amended) A kit comprising:
- a) a substantially pure [312C2 or fragment of Claim 1] protein or peptide of SEQ ID NO:2 or 4; and
 - b) an antibody or receptor which specifically binds a [312C2; or] protein or peptide of SEQ ID NO:2 or 4.
 - [c) a nucleic acid encoding a 312C2 or peptide.]
23. (New) A sterile or buffered composition comprising the antibody of Claim 6.
24. (New) The antibody of Claim 6 which is detectably labeled.
25. (New) The antibody of Claim 6 which is attached to a solid substrate.
26. (New) The antibody of Claim 6 which is a:
- a) polyclonal antibody; or
 - b) monoclonal antibody.
28. (New) The antibody of Claim 6, wherein the antigen binding fragment is a:
- a) Fab fragment;
 - b) Fab' fragment; or
 - c) F(ab)₂ fragment;
 - d) Fv fragment.
29. (New) The antibody of Claim 6 which is a humanized antibody.